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APPLICATION NO.	FILED DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/736,731	12/11/2000	Patrick Siu-Ying Hung	CP0005US	8072
22849	7590	10/23/2003	EXAMINER	
SCOTT W HEWETT 400 WEST THIRD STREET #223 SANTA ROSA, CA 95401			LABAZE, EDWYN	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/736,731

Applicant(s)

HUNG ET AL

Examiner

EDWYN LABAZE

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PW

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 9, 21 and 23-27 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 6 and 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Receipt is acknowledged of amendments filed on 7/14/2003.
2. Claims 1-33 are presented for examination.

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 10-15 is rejected under 35 U.S.C. 102(e) as being anticipated by Roustaei (U.S. 6,347,163).

Roustaei discloses system for reading two-dimensional images using ambient and/or projected light, which includes measuring light from an electronic display [which could be image from a computer 1408, a display device 1406 as stated by the prior art in col. 18, lines 50+] with an imaging camera or detector 206 [as disclosed in Fig. # 20 of Roustaei; and col.12, lines 47+] and, if the measured light is below a selected threshold (col.17, lines 65+); turning on

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an illumination lamp (col.18, lines 1+); and scanning [using the optical scanner 100] a computer-readable code from the electronic display with the imaging camera (col.23, lines 30+).

Re claim 11: Roustaei teaches a system and method, wherein the photodetector is a photo-diode 203 (col.6, lines 9+).

Reclaim 12: Roustaei discloses a system and method, wherein the photo-detector 206 is an imaging camera/CCD (col.12, lines 47+).

Re claim 14: Roustaei teaches a system and method, further comprises of means of evaluating an exposure level, and if the exposure level is outside the pre-selected limits (col.11, lines 1-67); adjusting an exposure parameter of the scanner (col.12, lines 1-67; col.13, lines 1+); and scanning the image from the electronic display (col.23, lines 30+).

Re claims 16 and 22: Roustaei discloses a system, which includes means of measuring a read/refresh period (# frames per seconds) of the electronic display (col.13, lines 4+) setting an exposure time of the imaging scanner according to the measure refresh period (col.17, lines 6-67), and imaging a barcode displayed on the emissive electronic display (col.3, lines 7+).

Re claims 17-19: Roustaei teaches a system, wherein the exposure time is at least twice, ten times, between 10-20 times the readout/refresh period of the electronic display (col.17, lines 12+).

Re claim 20: Roustaei discloses a system and method further comprises steps of capturing the image from an electronic display (col.2, lines 24+), evaluating the image for an exposure level [meaning determining the black level of captured image or if additional illumination is needed so as to supply extra illumination] (col.2, lines 48+), and adjusting an

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exposure parameter of the imaging parameter according the exposure level [which is done through the Automatic Gain Control/AGC (col.17, lines 64+).

***Response to Arguments***

5. Applicant's arguments filed 7/14/2003 have been fully considered but they are not persuasive.

Re claims 1-5, 8, 28-33: The applicant argues that the illumination source of the prior art of record, Brandorff creates specular reflection off the target and is not disposed at an angle to avoid specular reflection of light from the scanned surface (page 14, 1<sup>st</sup> paragraph of applicant's remarks).

Applicant claims must be interpreted broadly therefore, although the examiner appreciates applicant's arguments, the examiner can interpret the claims broader than the applicant's arguments. As interpreted by examiner, there is a light source, which is positioned at an angle [since Brandorff discloses that light is transmitted to the target surface from a first direction and reflected from a second direction]. The imaging/detecting & optics are arranged to avoid specular reflections taught by Brandorff. Possibly a wording change to the claimed invention "the angle chosen in a manner to avoid specular reflection..." for example as stated in claims 6 and 9 as positively claimed the angle being regarded as the means of avoiding specular reflection. Therefore the examiner believes that Brandorff's teachings can be broadly read to reject the claims.

***Allowable Subject Matter***

6. Claims 6-7 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach a specified angle from the target surface to avoid specular reflection of light from the illumination lamp of the surface of the imaging camera.

8. Claims 9, 21, and 23-27 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach a specific method and structure for determining the an aspect ratio of a barcode and if said ratio is outside of the pre-selected limits, scaling the digitized image to create a scale virtual image with scaled barcode elements having aspect ratios within the pre-selected limits. The limitations in conjunction with other limitations in the claimed invention were not shown by the prior art of record.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Patty et al. (U.S. 5,317,331) discloses symbology display method.

Chow (U.S. 5,367,596) teaches method of making a modulated fiber optic image scanner.

Li et al. (U.S. 6,065,678) discloses barcode scanner having a focussing system.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWYN LABAZE whose telephone number is (703) 305-5437. The examiner can normally be reached on 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (703) 305-3503. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

el  
Edwyn Labaze  
Patent Examiner  
Art Unit 2876  
October 20, 2003



KARL D. FRECH  
PRIMARY EXAMINER